

1       **WHAT IS CLAIMED IS:**

2           1. A feeding device for a table saw comprising:

3                  a sliding board adapted to be slidably mounted on one side of a  
4                  worktable of the table saw and having a moving direction corresponding to a  
5                  saw blade of the table saw, the sliding board including two grooves defined in  
6                  two opposite sides thereof, the two grooves respectively parallel to the moving  
7                  direction of the sliding board;

8                  a moving seat selectively slidably mounted on one side of the sliding  
9                  board;

10                 a pushing rod laterally slidably mounted to the moving seat and  
11                 having a first side forming a pushing face adapted to abut against a datum of a  
12                 workpiece; and

13                 a first locking device and a second locking device respectively  
14                 extending through the pushing rod and the moving seat to selectively hold the  
15                 pushing rod and the moving seat in place on the sliding board and confirm a  
16                 cutting angle of the workpiece, wherein a distance between the first locking  
17                 device and the saw blade is shorter than that between the second locking device  
18                 and the saw blade.

19                 2. The feeding device as claimed in claim 1, wherein:

20                 the first locking device comprises a threaded rod extending  
21                 through the pushing rod and a sliding block slidably received in a  
22                 corresponding one of the two grooves in the sliding board, the sliding block  
23                 having a threaded hole defined therein and the threaded rod screwed into the  
24                 threaded hole to hold the sliding block in place; and

1                   the second locking device comprises a threaded rod extending  
2 through the moving seat and a sliding block slidably received in a  
3 corresponding one of the two grooves in the sliding board, the sliding block of  
4 the second locking device having a threaded hole defined therein and the  
5 threaded rod of the second locking device screwed into the threaded hole in the  
6 sliding block of the second locking device to hold the sliding block of the  
7 second locking device in place.

8                 3. The feeding device as claimed in claim 1, wherein the moving seat  
9 comprises a rail laterally extending therefrom and having a T-shaped  
10 cross-section, and the pushing rod comprises a sliding groove laterally defined  
11 in a second side of the pushing rod for slidably receiving the rail of the moving  
12 seat.

13                 4. The feeding device as claimed in claim 1 further comprising a  
14 graduation plate securely attached to the sliding block of the second locking  
15 device, the graduation plate having a series of scales formed on an arc edge  
16 thereof, thereby the moving seat includes an indicator attached to one end of the  
17 moving seat and corresponding to the series of the graduation plate for  
18 indicating an operating angle of the moving seat and the pushing rod.

19                 5. The feeding device as claimed in claim 2, wherein the threaded rods  
20 of the first locking device and the second locking device each has a handle  
21 extending therefrom for easily operating the threaded rods.

22                 6. The feeding device as claimed in claim 2, wherein the moving seat  
23 comprises a rail laterally extending therefrom and having a T-shaped  
24 cross-section, and the pushing rod comprises a sliding groove laterally defined

1       in a second side of the pushing rod for slidably receiving the rail of the moving  
2       seat.

3           7. The feeding device as claimed in claim 2 further comprising a  
4       graduation plate securely attached to the sliding block of the second locking  
5       device, the graduation plate having a series of scales formed on an arc edge  
6       thereof, thereby the moving seat includes an indicator attached to one end of the  
7       moving seat and corresponding to the series of the graduation plate for  
8       indicating an operating angle of the moving seat and the pushing rod.

9           8. The feeding device as claimed in claim 3 further comprising a  
10      graduation plate securely attached to the sliding block of the second locking  
11      device, the graduation plate having a series of scales formed on an arc edge  
12      thereof, thereby the moving seat includes an indicator attached to one end of the  
13      moving seat and corresponding to the series of the graduation plate for  
14      indicating an operating angle of the moving seat and the pushing rod.

15           9. The feeding device as claimed in claim 4, wherein:

16               the moving seat comprises:

17                   a bore defined in the moving seat;

18                   a steel ball movably received in the bore in the moving seat  
19                   and partially extending through a bottom of the moving seat;

20                   a spring longitudinally compressively received in the bore in  
21                   the moving seat for abutting against the steel ball; and

22                   a blot partially screwed into the bore to hold the steel ball and  
23                   the spring in place in the bore; and

24               the graduation plate comprises multiple dimples defined for

1       partially receiving the steel ball, each dimple situated on a certain angle for  
2       quickly orientating the moving seat and the pushing rod.

3           10. The feeding device as claimed in claim 7, wherein:

4                   the moving seat comprises:

5                           a bore defined in the moving seat;

6                           a steel ball movably received in the bore in the moving seat

7                           and partially extending through a bottom of the moving seat;

8                           a spring longitudinally compressively received in the bore in  
9                           the moving seat for abutting against the steel ball; and

10                           a blot partially screwed into the bore to hold the steel ball and  
11                           the spring in place in the bore; and

12                           the graduation plate comprises multiple dimples defined for  
13       partially receiving the steel ball, each dimple situated on a certain angle for  
14       quickly orientating the moving seat and the pushing rod.

15           11. The feeding device as claimed in claim 8, wherein:

16                   the moving seat comprises:

17                           a bore defined in the moving seat;

18                           a steel ball movably received in the bore in the moving seat

19                           and partially extending through a bottom of the moving seat;

20                           a spring longitudinally compressively received in the bore in  
21                           the moving seat for abutting against the steel ball; and

22                           a blot partially screwed into the bore to hold the steel ball and  
23                           the spring in place in the bore; and

24                           the graduation plate comprises multiple dimples defined for

- 1 partially receiving the steel ball, each dimple situated on a certain angle for
- 2 quickly orientating the moving seat and the pushing rod.